

GTA is developing a carefully planned approach for implementing Voice over Internet Protocol (VoIP) in Georgia state government.

We are assessing the potential for VoIP to

- constrain increases in telecommunications costs
- improve the productivity of state employees
- enhance service delivery to constituents.

The size of the telephone network supported by GTA – more than 226,000 lines statewide – means a clear and comprehensive implementation strategy is essential.

We began our formal efforts in February 2005 with assistance from The Burton Group, a leading expert in VoIP.

A report given to GTA by The Burton Group in July 2005 recommended a carefully planned migration to a hybrid IP-PBX environment in order to

- minimize capital, operational and maintenance costs
- allow agencies to retain their existing voice and data networks and to migrate to a converged network when they need it and can afford it
- enable agencies to use analog, digital or IP telephones
- allow services to be managed from a central location to further reduce costs.

The report recommended against a “fork-lift” upgrade to VoIP. Such an approach would be costly, requiring the replacement of existing telephone systems and the upgrading of agency local area networks (LANs).

The report recommended the following phased-in approach to implementing VoIP

1. when an agency builds a new facility
2. when agency locations have decided to use a non-PSTN voice solution and their existing telecommunications equipment is nearing the end of its life cycle
3. when an agency has a critical need for increased mobility and to support teleworker applications, and
4. for traditional Centrex users with basic feature and function requirements, migration would be triggered by the potential for the agency to reduce monthly recurring costs and when LAN upgrades are also needed for other projects.

The report recommended that VoIP be managed and operated by a third-party vendor with the equipment owned by the state.

GTA will continue to prepare for VoIP migration throughout state government by

- using VoIP-compliant wiring in newly constructed and renovated space
- adding IP telephones to the state's contracts for telecom equipment.

GTA is completing the MPLS upgrade of the state's WAN to provide greater bandwidth and reliability. Multi-protocol label switching supports new technologies like VoIP, which requires quality of service – the ability to give voice priority over other transmissions – to avoid audio breakups and popping or clicking sounds.

GTA will develop equipment standards to support VoIP in state agencies, including those for LANs, wiring, switches and access points for wireless devices. Agencies should use open standards to avoid dependence on a single vendor's technology.